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09/03/21
03:58 PM

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding
Broadband Infrastructure Deployment and to
Support Service Providers in the State of
California.

R. 20-09-001
Dated: September 10, 2020

COMMENTS OF COX CALIFORNIA TELCOM, LLC (U-5684-C)

Pursuant to the Commission's Rules of Practice and Procedure ("Rules"), Cox California Telcom, L.L.C., *dba* Cox Communications (U-5684-C) ("Cox") timely submits these comments in response to the Assigned Commissioner Ruling, dated August 6, 2021 ("AC Ruling") and the Administrative Law Judge ruling, dated August 20, 2021, extending the date for the submission of comments to September 3, 2021.

Now more than ever, an internet connection is critical for education, healthcare, communicating with friends and family and participating in the workforce. Cox shares the goal of ensuring that Californians universally have access to robust broadband networks and commends the Governor and Legislature for their \$6 billion broadband investment authorized through Senate Bill ("SB") 156. Closing the digital divide is vital to California's future and Cox remains committed to working with stakeholders to ensure no Californian is left behind in the digital divide.

**I. THE COMMISSION PRIORITIZING COMMUNITIES THAT ARE DEEMED
UNSERVED UNDER SB 156 WILL ACHIEVE THE GOALS OF SB 156.**

SB 156 is unique legislation in many ways, including the number of agencies and stakeholders it tasks with compiling information for and otherwise collaborating with the newly created Office of Broadband and Digital Literacy ("BDL Office") which is responsible for planning and developing a statewide open-access middle-mile broadband network. Notably, SB

156 creates the BDL Office within the California Department of Technology (“CDT”) to oversee the development, construction, maintenance, and operation of a middle-mile network.

Recognizing the Commission’s important, though limited, role under SB 156, the AC Ruling solicits comments so that the Commission can identify locations for the statewide open-access middle-mile broadband network for the purpose of developing a staff report to assist the BDL Office. The Commission’s role in creating this staff report in the initial phase is critical to the success of SB 156’s goal of ensuring that unserved areas will finally be served and that federal funding will be efficiently, timely and properly spent.

Fortunately, SB 156 includes detailed statutory guidance that the Commission can and should follow in identifying locations for the middle-mile network. Both the statutory requirements and the Legislature’s intent provide for the Commission to take steps that prioritize first those communities that are not served by a provider offering at least 25 Mbps downstream and 3 Mbps upstream (25/3 unserved standard). To that end, in alignment with the statutory guidance, Cox recommends that the Commission adopt the following sequence of analysis for identifying locations for the middle-mile network for the purpose of providing a staff report to the BDL Office:

- First, the Commission should identify communities with service at or below 25mbps/3mbps internet service (“unserved communities”);
- Second, for each of these unserved communities, the Commission should identify any existing middle-mile network infrastructure that is also open-access with sufficient capacity;
- Third, for each of these unserved communities with no known existing open-access middle-mile infrastructure with sufficient capacity, the Commission should identify those communities where a middle-mile network will enable last-mile service connections and can be built expeditiously;
- Fourth, the Commission should consider whether the schools, universities, libraries, government entities, health care institutions, public safety answering points and/or

tribal lands in the unserved communities identified lack sufficient high-bandwidth connections; and

- Fifth, after such communities have been identified, the Commission can then identify state highways that could serve as routes to the identified communities so as to achieve the greatest reductions in the number of households unserved by the 25/3 unserved standard.

Once the Commission has completed this logical sequence of analysis, it will have identified and can report locations for the statewide open-access middle-mile network to the BDL Office. Cox respectfully submits that seeking comments outside of this sequence will result in responses that are inconsistent with the intent of SB 156. By following the sequencing identified above, the Commission will ensure that the BDL Office has the information it needs to plan and develop the open-access middle-mile network that the BDL Office is charged with deploying. Most importantly, it will help ensure that all Californians will have access to broadband service.

II. COX RESPONSES TO QUESTIONS 1-6

A. Question 1: Identifying Existing Middle Mile Infrastructure

Attachment A provides a list of the state routes proposed for the statewide open access middle mile network, referred to as the “Anchor Build Fiber Highways.” These routes may also be viewed on an ArcGIS map, which can be found here: <https://www.arcgis.com/home/webmap/viewer.html?webmap=e17e4e1c88b04792ab0a2c50aa1a19a3&extent=-126.1445,34.5234,-113.5981,41.1113>

- **What routes, if any, should be modified, removed from consideration, or revised? Provide an explanation for these suggestions.**
- **Are there existing middle mile routes that are open access, with sufficient capacity, and at affordable rates on the county highway routes listed in Attachment A?**
- **In the context of these comments, what is sufficient capacity and affordable rates?**
- **For routes that are identified as being open access, with sufficient capacity, and at affordable rates, how should the Commission verify these claims (e.g., should Communications Division send a data request for service term sheets, rates, approximate dark fiber, lit fiber, and conduit capacity, etc.)? Are there any other criteria that should be used to verify these claims?**

Cox appreciates the Commission promptly issuing the AC Ruling and opening the public

comment period. The AC Ruling Attachment 1 (“Attachment 1”) includes a link to a map of state routes proposed for the statewide open-access middle-mile network and seeks feedback on which routes should be removed from consideration. As previously described in detail, Cox respectfully submits that the Commission should not start with identifying state routes, but instead start with identifying unserved communities.

By following the proposed sequence of analysis, the state routes that should be removed from consideration will become self-evident. In other words, any state route that would not serve as a route to a specifically identified unserved community with no known existing open-access middle-mile infrastructure with sufficient capacity where a middle-mile network will enable last-mile service connections and can be built expeditiously should be removed from further consideration. This will ensure that finite state and federal resources are prioritized for truly unserved communities so that no community is left behind in the digital divide which is the underpinning of both SB 156 and the Governor’s Executive Order.

As to whether there are existing middle-mile routes that are open-access, with sufficient capacity and at affordable rates on the highway routes listed in Attachment 1, Cox submits that existing wholesale providers may have “middle-mile” infrastructure available in or near some but not all of the areas shown on the Commission’s map, even if those providers do not necessarily advertise or offer their services as being “middle-mile” or being available as “open access.”¹ SB 156 defines “open access” as offering service that provides “equal non-discriminatory access to eligible entities on a technology and competitively neutral basis.” As

¹ Indeed, “open access” is a relatively new term-of-art in the context of broadband, making it difficult to know what existing infrastructure and/or service may meet this definition.

such, to the extent that existing wholesale providers have networks in or near unserved communities, this would be a good opportunity for the BDL Office to determine whether it could use such facilities for its efforts.

B. Question 2: Priority Areas

Federal funding must be encumbered and spent in a limited time period. Additionally, unserved and underserved areas of the state are in substantial need of broadband infrastructure investment.

- **Is it reasonable to assume counties with a disproportionately high number of unserved households (e.g., 50% or more unserved at 100 Mbps download) are areas with insufficient middle-mile network access?**
- **What other indicators, if any, should the Commission use to identify priority statewide open-access middle-mile broadband network locations (i.e., built expeditiously, areas with no known middle-mile network access, regions underserved by middle-mile networks, regions without sufficient capacity to meet future middle-mile needs)?**

SB 156 requires the Commission to adhere to certain criteria when identifying middle-mile network locations by prioritizing unserved communities. The proposed sequence of analysis detailed above captures these criteria and should be used in determining locations for the statewide open-access middle-mile network.

For example, Government Code (“GC”) Section 11549.54(c) directs the Commission to prioritize locations that can be built expeditiously:

The commission shall identify priority statewide open-access middle-mile broadband network locations, including areas that can be built expeditiously, areas with no known middle-mile network access, regions underserved by middle-mile networks, and regions without sufficient capacity to meet future middle-mile needs.

This “built expeditiously” requirement is captured in Step 3 in the sequence Cox identifies above.

GC Section 11549.54(d) requires the Commission to prioritize middle-mile network locations that will enable last-mile connections to unserved communities, which is also identified in the sequence above. Additionally, this code section allows (but does not require) the

Commission to next prioritize other entities that lack high-bandwidth connections, such as schools, community colleges, healthcare, tribal lands and others.² Accordingly, Step 4 in the sequence of analysis captures the directive in GC Section 11549.54(d).

Cox strongly recommends that the Commission not make assumptions about percentage of households being served, but rather, follow the steps that SB 156 effectively requires the Commission to take. Prioritizing the federal funding to unserved communities is not only required by statute, but also is the right course of action to bring broadband service to communities without 25/3 service. This prioritization will ensure that unserved communities finally get served and puts the BDL Office on a fast-track for ensuring that federal funds are encumbered in the time available.

C. Question 3: Assessing the Affordability of Middle Mile Infrastructure

A key consideration is determining the cost of various middle mile services. Through identifying the costs of these services in California, as well as across the country and globe the Commission can identify a threshold whereby services can be considered reasonably affordable.

- **What are existing providers paying or charging for middle mile services?**
- **Are there other factors or sources of information the Commission should consider for determining whether these services are affordable?**
- **Is it reasonable for the costs of these services to change depending on the location where the service is provided (i.e., rural vs urban)?**

Cox reserves the right to file reply comments after reviewing the opening comments of other parties.

D. Question 4: Leasing Existing Infrastructure

Indefeasible Rights of Use (IRUs) are long term leases (generally 20 to 30 years) for unrestricted, legal capacity on a communications network for a specified period of time.[1] These contracts generally obligate the purchaser to pay a portion of the operating costs, and the costs of maintaining the infrastructure.

- **If there is existing open access communications infrastructure with sufficient capacity to meet the state's needs, should the state purchase IRUs from that network?**

² See GC Section 11549.54(d).

- **Is there any value in the state purchasing an IRU from the network if capacity is already available?**
- **If the state relies on IRUs for the development of the statewide network, will the generational investment that this funding provides be diminished when the IRU leases end 20 to 30 years later? Will existing networks run out of spare capacity?**

Cox understands that under SB 156, the Commission is charged with identifying where there is existing middle-mile open-access broadband infrastructure with sufficient capacity for unserved communities, and that the BDL Office, which is charged with planning and developing a middle-mile network, will need to address whether the state should purchase IRUs or other from an existing provider.

If there is existing infrastructure that can meet the needs of the middle-mile network that the BDL Office is charged with developing, then the BDL Office, in collaboration with the third-party administrator contemplated in SB 156, can explore the option of purchasing IRUs with existing service providers. Indeed, utilizing existing infrastructure through a negotiated IRU or other means that meets the needs of the state while reducing capital expenses and expediting service deployment to unserved communities, would be a fiscally prudent approach. Ultimately, it is the responsibility of the BDL Office to explore such options as it endeavors to design and deploy the statewide middle-mile network, using the Commission's recommendations to determine build locations.

E. Question 5: Interconnection

The statewide network will need to connect with other networks in order to deliver services.

- **At what points should the statewide network interconnect (e.g., to other networks, servers, etc.)?**
- **Are additional exchange points necessary or strategic, and if so, where?**

6. Network Route Capacity:

The state will need to determine the amount of capacity to build into the network to meet existing and future demand.

- **How many strands of fiber should the network deploy for each route?**
- **Are there other requirements or standards the Commission needs to consider to determine sufficient capacity?**

- **Should the network also deploy additional conduit within each route for potential future expansion?**
- **Should these factors change based on the population density and distance from the core network?**

Underscoring the importance of the previously proposed sequence of analysis, Cox is responding to Questions 5 and 6 collectively in that the answers to these questions will depend on the specific unserved communities for which the middle-mile network is being designed to serve. These very technical questions cannot be answered with a one-size-fits-all approach. For example, Cox anticipates that once the unserved communities are identified, the middle-mile network will need to be designed to interconnect and hand-off traffic at the most cost-effective interconnection points.

The same is true for capacity. A middle-mile network's capacity will necessarily be based on the amount and type of households and businesses in the area to be served and other factors such as redundancy, among others. It will not be a one-size-fits-all approach. As such, it relies in part on the Commission to first identify unserved communities. From there, the BDL Office, once it determines where it will build the network, taking into account the needs of each community, will be able to determine appropriate capacity for the network.

III. CONCLUSION.

Cox appreciates having the opportunity to provide comments with respect to the Commission soliciting public comments on locations for middle-mile networks that the Commission will include in a staff report to be provided to the BDL Office. Cox recommends

that that the Commission follow the sequence of steps detailed here in as this will ensure that unserved communities will have access to broadband service as contemplated by SB 156.

Dated: September 3, 2021

Respectfully submitted,

/s/ Margaret L. Tobias

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